

EPA Issues Final Amendments to NSPS

On November 16, 2007 the EPA issued final amendments to the New Source Performance Standards (NSPS) Subpart VV, which pertains to the measurement and detection of volatile organic compound (VOC) leaks from equipment located in the Synthetic Organic Chemicals Manufacturing Industry (SOCMI). Commonly affected SOCMI facilities in Iowa include ethanol and biodiesel production plants. The standard specifically applies to valves, pumps, compressors, pressure relief devices, flanges and other equipment in VOC service at these plants. These final amendments are the result of EPA's required review for all NSPS. EPA originally issued the standards for Subpart VV in 1983.

Subpart VV is a maintenance and repair program, that when properly implemented, can significantly reduce fugitive VOC emissions from leaks. Monitoring is required to be completed monthly for most equipment, but some equipment may be monitored less often if leaks are not detected for two successive months. The type of monitoring that is required is based on the vapor pressure of the fluid in the line, which includes gas/vapor service, light liquid service, and heavy liquid service. The monitoring requirements are also different for each type of component being measured, such as for valves, compressors, and pressure relief devices. Even the definition of a leak is dependent on the type of service and component being measured, but is generally defined as an instrument reading of 10,000 parts per million (ppm), or a visible leak. The first attempt at repairing a leak must occur within five days, and final repairs must be completed within 15 days, but there are provisions for delaying a repair beyond 15 days. SOCMI facilities must also adhere to the recordkeeping and reporting requirements located in Subpart VV, which includes keeping leak logs, tagging leaking equipment, and the submission of semi-annual reports.

Most notable in EPA's final amendments to NSPS Subpart VV is the change of applicability to only sources that commence construction, reconstruction, or modification after January 5, 1981, and on or before November 7, 2006. Other changes for facilities that fall into this category include:

- Clarification of the definition of "process unit"
- Alternative compliance options for batch processes
- Clarification of new equipment monitoring requirements added after initial start up of process unit
- Additional requirements for containers in closed-purge sampling systems
- Modification of monitoring requirements for delayed repair of pumps
- Examples of what are considered to be first attempts at pump repairs

Sources that commence construction, reconstruction, or modification after November 7, 2006 are now subject to a separate requirement called Subpart VVa. This regulation:

- Lowers leak definitions from 10,000 ppm to 2,000 ppm for pumps and 500 ppm for valves
- Adds monitoring requirements for connectors and establishes a leak level of 500 ppm
- Clarifies the monitoring requirements of new equipment that is added after initial start up of a process unit
- Adds recordkeeping requirements for all monitoring equipment
- Adds the requirement for a calibration drift assessment at the end of the monitoring day

The Department of Natural Resources (DNR) plans to adopt these new amendments by late spring 2008.

To access both text and PDF versions of the final amendments, please visit EPA's website at www.epa.gov/EPA-AIR/2007/November/Day-16/.

For more information about EPA's amendments and new standards, please contact Bryan Bunton at DNR's Air Quality Bureau at (515) 281-0363 or by e-mail at bryan.bunton@dnr.iowa.gov.